```
L7
     ANSWER 1 OF 51 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1999:184225 CAPLUS
DN
     130:223059
     Molecular compounds containing phenol derivatives as constituent
TI
     Aoki, Izuo; Sato, Takehiro; Amaike, Masato; Suzuki, Hiroshi
IN
PA
     Nippon Soda Co., Ltd., Japan
SO
     PCT Int. Appl., 339 pp.
     CODEN: PIXXD2
DT
     Patent
     Japanese
LA
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
                             _ ~ - - - - -
                                            -----
     WO 9911609
                            19990311
                                            WO 1998-JP3917
                                                             19980902
ΡI
                       Α1
         W: US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
                            19990713
                                            JP 1998-276724
                                                             19980902
     JP 11189565
                       A2
     EP 1016656
                       A1
                            20000705
                                            EP 1998-941671
                                                             19980902
         R: DE, FR, GB, IT
PRAI JP 1997-252930
                       Α
                            19970902
     JP 1997-308058
                       Α
                            19971022
     WO 1998-JP3917
                       W
                            19980902
os
     MARPAT 130:223059
IT
     221085-36-5P
     RL: CAT (Catalyst use); PRP (Properties); SPN (Synthetic preparation); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (epoxy resin hardener, inclusion compd.; mol. compds. (inclusion
        compds.) contg. phenol derivs. as hosts for imparting chem. or thermal
        stability and slow releasability, to org. compds.)
RN
     221085-36-5 CAPLUS
     Phenol, 4,4'-sulfonylbis[2-(phenylsulfonyl)-, compd. with
CN
     2-ethyl-4-methyl-1H-imidazole (1:2) (9CI) (CA INDEX NAME)
     CM
          1
     CRN
         177325-72-3
     CMF
          C24 H18 O8 S3
```

CRN 931-36-2 CMF C6 H10 N2

## IT 221085-37-6P 221085-38-7P 221085-39-8P

221085-40-1P 221085-41-2P

RL: NUU (Other use, unclassified); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(inclusion compd.; mol. compds. (inclusion compds.) contg. phenol derivs. as hosts for imparting chem. or thermal stability and slow releasability, to org. compds.)

RN 221085-37-6 CAPLUS

CN Phenol, 4,4'-sulfonylbis[2-(phenylsulfonyl)-, compd. with pyridine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 177325-72-3 CMF C24 H18 O8 S3

. CM 2

CRN 110-86-1 CMF C5 H5 N



RN 221085-38-7 CAPLUS

CN 2-Imidazolidinone, 1,3-dimethyl-, compd. with pyridine and 4,4'-sulfonylbis[2-(phenylsulfonyl)phenol] (1:1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 177325-72-3 CMF C24 H18 O8 S3

CRN 110-86-1 C5 H5 N CMF



CM3

CRN 80-73-9 CMF C5 H10 N2 O

221085-39-8 CAPLUS

RNPhenol, 4,4'-sulfonylbis[2-(phenylsulfonyl)-, compd. with tetrahydrofuran (1:4) (9CI) (CA INDEX NAME) CN

CM1

CRN 177325-72-3 C24 H18 O8 S3 CMF

$$O = S - Ph$$

CM

CRN 109-99-9 CMF C4 H8 O



221085-40-1 CAPLUS RNCN

Phenol, 4,4'-sulfonylbis[2-(phenylsulfonyl)-, compd. with 1,4-dioxane

(1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 177325-72-3 CMF C24 H18 O8 S3

CM 2

CRN 123-91-1 CMF C4 H8 O2

RN 221085-41-2 CAPLUS

CN Formamide, N,N-dimethyl-, compd. with 4,4'-sulfonylbis[2-(phenylsulfonyl)phenol] (3:2) (9CI) (CA INDEX NAME)

CM 1

CRN 177325-72-3 CMF C24 H18 O8 S3

CM 2

CRN 68-12-2 CMF C3 H7 N O

## IT 221085-34-3P 221085-35-4P

RL: AGR (Agricultural use); BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses) (industrial disinfectant, inclusion compd.; mol. compds. (inclusion compds.) contg. phenol derivs. as hosts for imparting chem. or thermal stability and slow releasability, to org. compds.)

RN 221085-34-3 CAPLUS

CN 3(2H)-Isothiazolone, 5-chloro-2-methyl-, compd. with 4,4'-sulfonylbis[2-(phenylsulfonyl)phenol] (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 177325-72-3 CMF C24 H18 O8 S3

CM 2

CRN 26172-55-4 CMF C4 H4 C1 N O S

RN 221085-35-4 CAPLUS

CN 3(2H)-Isothiazolone, 5-chloro-2-methyl-, compd. with 4,4'-sulfonylbis[2-(phenylsulfonyl)phenol] (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 177325-72-3 CMF C24 H18 O8 S3

HO 
$$S$$
— Ph  $O$ —  $S$ — Ph  $O$ —  $S$ — Ph  $O$ —  $O$ 

CRN 26172-55-4 CMF C4 H4 Cl N O S

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L7
    ANSWER 6 OF 51 CAPLUS COPYRIGHT 2003 ACS
```

AN 1996:338221 CAPLUS

DN 125:22377

Sulfonyl compound and thermal-sensitive recording medium using the same ΤI

IN Saito, Toranosuke; Oda, Shigeru; Kawabata, Eiji

Sanko Kaihatsu Kagaku Kenkyusho, Japan PΑ

Eur. Pat. Appl., 34 pp. SO

CODEN: EPXXDW

Patent DT

English LA

FAN CNT 1

r	'AM'	'IN I	1			,	
		PAT	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
		:					
P	ΡI	ΕP	706997	A1	19960417	EP 1995-116182	19951013
		ΕP	706997	B1	19980311		
			R: BE, DE,	GB			
		JP	08269000	A2	19961015	JP 1995-247319	19950926
		JΡ	3273403	B2	20020408		
		US	5705452	Α	19980106	US 1995-540722	19951011
P	RAI	JP	1994-249265	Α	19941014		
		JP	1995-12134	A ·	19950130		

MARPAT 125:22377 OS

177325-72-3P ΙT

> RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepd. as developer for thermal sensitive recording material)

RN177325-72-3 CAPLUS

Phenol, 4,4'-sulfonylbis[2-(phenylsulfonyl)- (9CI) CN (CA INDEX NAME)

ANSWER 7 OF 51 CAPLUS COPYRIGHT 2003 ACS L7

1995:846608 CAPLUS AN

DN 124:246475

ΤI Positive working recording material with improved developability

IN Elsaesser, Andreas; Buhr, Gerhard

PA Hoechst A.-G., Germany

SO Ger. Offen., 10 pp.

CODEN: GWXXBX

DTPatent

LA German

FAN.CNT I								
P.	ATENT NO.	KIND	DATE	AP	PLICATION NO.	DATE		
PI D	E 4401940	A1	19950727	DE	1994-4401940	19940124		
E	P 668540	A1	19950823	ΕP	1995-100490	19950116		
E	P 668540	B1	20000510					
•	R: DE, FR,	GB, IT	, NL					
В	R 9500283	Α	19951017	BR	1995-283	19950123		
J	P 07287392	A2	19951031	JP	1995-9246	19950124		
U	S 5753405	Α	19980519	US	1996-674971	19960703		
PRAI D	E 1994-4401940		19940124					

US 1995-374906

19950119

OS MARPAT 124:246475

IT 151438-20-9 151438-21-0

RL: MOA (Modifier or additive use); USES (Uses) (Pos. working recording material with improved developability)

RN · 151438-20-9 CAPLUS

CN 1-Naphthalenesulfonic acid, 3-diazo-3,4-dihydro-4-oxo-, ester with 1,1'-[methylenebis(4,5,6-trihydroxy-3,1-phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 168766-34-5 CMF C17 H16 O8

$$\begin{array}{c} \text{OH} \\ \text{HO} \\ \text{OH} \\ \text{OH} \end{array}$$

CM 2

CRN 20680-48-2 CMF C10 H6 N2 O4 S

RN 151438-21-0 CAPLUS

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with 1,1'-[methylenebis(4,5,6-trihydroxy-3,1-phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 168766-34-5 CMF C17 H16 O8

$$AC$$
 $CH_2$ 
 $AC$ 
 $OH$ 
 $OH$ 
 $OH$ 
 $OH$ 

CRN 20546-03-6 CMF C10 H6 N2 O4 S

IT 168766-34-5 168766-38-9

RL: MOA (Modifier or additive use); USES (Uses) (development promoter; Pos. working recording material with improved developability)

RN 168766-34-5 CAPLUS

·CN Ethanone, 1,1'-[methylenebis(4,5,6-trihydroxy-3,1-phenylene)]bis- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OH} \\ \text{HO} \\ \text{OH} \\ \text{OH} \end{array}$$

RN 168766-38-9 CAPLUS

CN Ethanone, 1,1'-[methylenebis(4,6-dihydroxy-5-methyl-3,1-phenylene)]bis-(9CI) (CA INDEX NAME)

```
L7
     ANSWER 10 OF 51 CAPLUS COPYRIGHT 2003 ACS
AN
     1994:65973 CAPLUS
     120:65973
DN
TI
     Thermosensitive recording material
IN
     Nishimura, Masaki; Toyofuku, Kunitaka
     Oji Paper Co., Ltd., Japan
PΑ
     Eur. Pat. Appl., 16 pp.
SO
     CODEN: EPXXDW
DТ
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO.
                                                            DATE
                     ----
                                           -----
PΙ
     EP 535788
                      Α1
                            19930407
                                           EP 1992-307170
                                                            19920805
     EP 535788
                            19970305
                      B1
        R: DE, GB
     JP 05085059
                      A2
                            19930406
                                           JP 1991-251364
                                                            19910930
     US 5384303
                      Α
                            19950124
                                           US 1992-916693
                                                            19920722
PRAI JP 1991-251364
                            19910930
OS
    MARPAT 120:65973
IT
     151533-18-5
     RL: USES (Uses)
        (color-forming compns. contg. dye precursors and, for thermosensitive
        recording materials)
RN
     151533-18-5 CAPLUS
     Benzenepropanoic acid, 3-acetyl-.beta.-(3-acetyl-4-hydroxyphenyl)-4-
CN
    hydroxy-.beta.-methyl- (9CI) (CA INDEX NAME)
```

L7

```
1993:588611 CAPLUS
AN
DN
     119:188611
ΤТ
     Thrombolysis-accelerating agents containing diphenylhydrocarbons
IN
     Kaiho, Tatsuo; Matsunaga, Akio; Myamoto, Michihiko; Okumura, Kunio;
     Tanada, Hideki; Kosaka, Katsuhiro; Tamatsukuri, Atsushi
     Mitsui Toatsu Chemicals, Japan
PA
SO
     Jpn. Kokai Tokkyo Koho, 10 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
                                           -----
                     _ _ _ _
                            _____
ΡI
     JP 05170687
                      A2
                            19930709
                                           JP 1991-338382
                                                            19911220
PRAI JP 1991-338382
                            19911220
os
     MARPAT 119:188611
IT
     150371-94-1P
     RL: PREP (Preparation)
        (prepn. and .alpha.2-plasmin inhibitor inhibitory activity of, as
        thrombolytic)
RN
     150371-94-1 CAPLUS
CN
     Ethanone, 1,1'-[(1,3-dimethylbutylidene)bis(6-hydroxy-3,1-phenylene)]bis-
     (9CI) (CA INDEX NAME)
```

ANSWER 11 OF 51 CAPLUS COPYRIGHT 2003 ACS

=>

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ANSWER 12 OF 51 CAPLUS COPYRIGHT 2003 ACS
L7
AN
     1993:202100 CAPLUS
DN
     118:202100
     Positive-working photoresist compositions providing high resolution
ΤI
     Kawabe, Yasumasa; Sakaguchi, Shinji; Kokubo, Tadayoshi
IN
     Fuji Photo Film Co., Ltd., Japan
PA
SO
     Jpn. Kokai Tokkyo Koho, 19 pp.
     CODEN: JKXXAF
DT
     Patent
     Japanese
LA
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
                           -----
     ______
                      ----
                                           ------
                                                            _____
     JP 04296755
                      A2
                            19921021
                                           JP 1991-62152
PΙ
                                                            19910326
PRAI JP 1991-62152
                            19910326
     MARPAT 118:202100
OS
IT
     128197-51-3, 1,1-(5,5'-Diacetyl-2,3,4,2',3',4'-hexahydroxy
     ) diphenylethane
     RL: USES (Uses)
        (photoresist contg. quinonediazide compd. and)
     128197-51-3 CAPLUS
RN
     Ethanone, 1,1'-[ethylidenebis(4,5,6-trihydroxy-3,1-phenylene)]bis- (9CI)
CN
     (CA INDEX NAME)
     Ac
HO
           Me
                       Ac
           CH
HO
            HO
                       OH
      OH
                  OH
     ANSWER 13 OF 51 CAPLUS COPYRIGHT 2003 ACS
L7
AN
     1993:136265 CAPLUS
DN
     118:136265
     Photosensitive lithographic printing plate
TI
     Nagashima, Akira; Uenishi, Kazuya
IN
PA
     Fuji Photo Film Co., Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 12 pp.
SO
     CODEN: JKXXAF
DT
     Patent
     Japanese
LА
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO.
                                                            DATE
     -----
                     ----
                                           ______
     JP 03239261
                            19911024
                                           JP 1990-35665
PΙ
                      A2
                                                            19900216
PRAI JP 1990-35665
                            19900216
     128152-12-5 128197-51-3, 1,1-(5,5'-Diacetyl-
     2,3,4,2',3',4'-hexahydroxy)diphenylethane 128347-37-5
     143868-77-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (esterification of, in prepn. of photosensitizers for lithog. printing
       plates)
RN
     128152-12-5 CAPLUS
     Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)-
CN
     2,3,4-trihydroxy-, 4-nitrophenyl ester, 6-diazo-5,6-dihydro-5-oxo-1-
     naphthalenesulfonate (9CI) (CA INDEX NAME)
```

CRN 20546-03-6 CMF C10 H6 N2 O4 S

RN 128197-51-3 CAPLUS

CN Ethanone, 1,1'-[ethylidenebis(4,5,6-trihydroxy-3,1-phenylene)]bis- (9CI) (CA INDEX NAME)

RN 128347-37-5 CAPLUS

CN Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)-2,3,4-trihydroxy-, methyl ester (9CI) (CA INDEX NAME)

RN 143868-77-3 CAPLUS

CN Ethanone, 1,1'-[(2-methoxyethylidene)bis(4,5,6-trihydroxy-3,1-phenylene)]bis- (9CI) (CA INDEX NAME)

L7 ANSWER 14 OF 51 CAPLUS COPYRIGHT 2003 ACS

AN 1993:113172 CAPLUS

DN 118:113172

TI Photosensitive lithographic printing plate

IN Nagashima, Akira; Uenishi, Kazuya

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP 03239262	A2	19911024	JP 1990-35666	19900216	

PRAI JP 1990-35666

19900216

IT **133682-16-3D**, phenol derivs.

RL: USES (Uses)

(esterification reaction of, in prepn. of photosensitizers for lithog. printing plates)

RN 133682-16-3 CAPLUS

CN Ethanone, 1,1'-[(phenylmethylene)bis(4,5,6-trihydroxy-3,1-phenylene)]bis-(9CI) (CA INDEX NAME)

```
ANSWER 15 OF 51 CAPLUS COPYRIGHT 2003 ACS
L7
     1992:140130 CAPLUS
AN
DN
     116:140130
     Positive-type photoresist composition
TI
TN
     Kawabe, Yasumasa; Uenishi, Kazuya; Tan, Shiro
PΑ
     Fuji Photo Film Co., Ltd., Japan
     Eur. Pat. Appl., 34 pp.
so
     CODEN: EPXXDW
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                              DATE
PΙ
     EP 445819
                       A2
                             19910911
                                            EP 1991-103511
                                                              19910307
     EP 445819
                       A3
                             19911211
     EP 445819
                             20010822
                       В1
         R: DE, GB
     JP 03259149
                       A2
                             19911119
                                            JP 1990-57658
                                                              19900308
     JP 03279958
                       A2
                             19911211
                                            JP 1990-80028
                                                              19900328
     JP 03279959
                       A2
                             19911211
                                            JP 1990-80029
                                                              19900328
PRAI JP 1990-57658
                       Α
                             19900308
     JP 1990-80028
                       Α
                             19900328
     JP 1990-80029
                             19900328
                       Α
     MARPAT 116:140130
OS
     128197-51-3, 1,1-(5,5'-Diacetyl-2,3,4,2',3',4'-hexahydroxy
IT
     )diphenylethane
     RL: USES (Uses)
        (pos. photoresist compns. contg.)
RN
     128197-51-3 CAPLUS
     Ethanone, 1,1'-[ethylidenebis(4,5,6-trihydroxy-3,1-phenylene)]bis- (9CI)
CN
     (CA INDEX NAME)
```

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L7
                             COPYRIGHT 2003 ACS
     ANSWER 16 OF 51 CAPLUS
AN
     1991:666881 CAPLUS
DN
     115:266881
     Positive-working photoresist composition containing acetal solvent
TI
IN
     Kawabe, Yasumasa; Kokubo, Tadayoshi
PA
     Fuji Photo Film Co., Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 10 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
                      _ _ _ _
                                            _____
PΙ
     JP 03056960
                       A2
                            19910312
                                            JP 1989-192888
                                                             19890726
PRAI JP 1989-192888
                            19890726
IT
     135977-06-9
     RL: USES (Uses)
        (photoresist compn. contg. acetal solvent and, for soln. stability)
RN
     135977-06-9 CAPLUS
```

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with 1,1'-[(phenylmethylene)bis(4,5,6-trihydroxy-3,1-phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 133682-16-3 CMF C23 H20 O8

CM 2

CRN 20546-03-6 CMF C10 H6 N2 O4 S

```
ANSWER 17 OF 51 CAPLUS COPYRIGHT 2003 ACS
L7
AN
     1991:523862 CAPLUS
     115:123862
DN
ΤI
     Positive-working photoresist composition
     Kawabe, Yasumasa; Kokubo, Tadayoshi
IN
     Fuji Photo Film Co., Ltd., Japan
PA
     Jpn. Kokai Tokkyo Koho, 11 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                       KIND
                             DATE
                                             APPLICATION NO.
                                                              DATE
                       ----
ΡI
     JP 02247653
                       A2
                             19901003
                                             JP 1989-68751
                                                              19890320
     JP 2584311
                             19970226
                       B2
PRAI JP 1989-68751
                             19890320
     135977-06-9
IT
     RL: USES (Uses)
        (photosensitizer, photoresist compn. contg.)
RN
     135977-06-9 CAPLUS
     1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with
CN
     1,1'-[(phenylmethylene)bis(4,5,6-trihydroxy-3,1-phenylene)]bis[ethanone]
           (CA INDEX NAME)
     (9CI)
     CM
          1
     CRN
          133682-16-3
     CMF
          C23 H20 O8
```

CRN 20546-03-6 CMF C10 H6 N2 O4 S

```
ANSWER 18 OF 51 CAPLUS COPYRIGHT 2003 ACS
AN 1991:489122 CAPLUS
DN 115:89122
TI Demethylacrovestone from Achronychia pedunculata fruits
AU De Silva, Leslie B.; Herath, Wimal M.; Lyanage, Chandani; Kumar, Vijaya;
```

Ahmad, Viqar Uddin; Sultana, Azra

Nat. Prod. Chem. Div., Med. Res. Inst., Colombo, Sri Lanka CS

so Phytochemistry (1991), 30(5), 1709-10 CODEN: PYTCAS; ISSN: 0031-9422

DT . Journal

English LA

IT135383-99-2, Demethylacrovestone

RL: BIOL (Biological study)

(from Acronychia pedunculata fruits)

RN135383-99-2 CAPLUS

Ethanone, 1,1'-[(3-methylbutylidene)bis[2,4,6-trihydroxy-5-(3-methyl-2-CNbutenyl)-3,1-phenylene]]bis- (9CI) (CA INDEX NAME)

ANSWER 19 OF 51 CAPLUS COPYRIGHT 2003 ACS L7

AN 1991:256969 CAPLUS

114:256969 DN

Positive-working photoresist composition TI

Uenishi, Kazuya; Sakaguchi, Shinji; Kokubo, Tadayoshi IN

Fuji Photo Film Co., Ltd., Japan PA

Eur. Pat. Appl., 29 pp. SO

CODEN: EPXXDW

DTPatent

LA English

J	FAN.CNT 1										
		PATENT NO.			KIND	DATE	AP:	PLICATION	NO.	DATE	
				·							
]	ΡI	ΕP	3950	49		A1	19901031	EP	1990-107	925	19900426
		ΕP	3950	149		B1	19990721				
			R:	BE,	DE,	FR, GB					
		JP	0228	35351		A2	19901122	JP	1989-107	013	19890426
		JΡ	2700	918		. B2	19980121				
		US	5173	389		A	19921222	US	1990-514	811	19900426
1	PRAI	JΡ	1989	9-1070	013		19890426				

IΤ 133682-16-3D, dimethylhydroxybenzyl deriv.,

diazidonaphthoquinone sulfate

RL: USES (Uses)

(pos. photoresists contg. alkali-sol. novolak resins and)

RN 133682-16-3 CAPLUS

CN Ethanone, 1,1'-[(phenylmethylene)bis(4,5,6-trihydroxy-3,1-phenylene)]bis-(CA INDEX NAME)

```
L7
     ANSWER 24 OF 51 CAPLUS COPYRIGHT 2003 ACS
ΑN
     1990:468417 CAPLUS
DN
     113:68417
     Positive-working photoresist composition
ΤI
IN
     Uenishi, Kazuya; Kawabe, Yasumasa; Kokubo, Tadayoshi
PA
     Fuji Photo Film Co., Ltd., Japan
SO
     Jpn. Kokai Tokkyo Koho, 11 pp.
     CODEN: JKXXAF
DT
     Patent
     Japanese
LA
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                              DATE
                       A2
                             19891213
PΙ
     JP 01309052
                                            JP 1988-139904
                                                              19880607
     JP 2552900
                       B2
                             19961113
     US 5089373
                       Α
                             19920218
                                            US 1989-363568
                                                              19890607
PRAI JP 1988-139904.
                             19880607
     128152-08-9 128152-12-5 128197-52-4
     RL: USES (Uses)
        (pos.-working photoresist compn. contg.)
RN
     128152-08-9 CAPLUS
     Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)-
CN
     2,3,4-trihydroxy-, methyl ester, 6-diazo-5,6-dihydro-5-oxo-1-
     naphthalenesulfonate (9CI) (CA INDEX NAME)
     CM
          1
     CRN
          128347-37-5
     CMF
          C19 H18 O10
```

CRN 20546-03-6 CMF C10 H6 N2 O4 S

RN 128152-12-5 CAPLUS

CN Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)-2,3,4-trihydroxy-, 4-nitrophenyl ester, 6-diazo-5,6-dihydro-5-oxo-1-naphthalenesulfonate (9CI) (CA INDEX NAME)

CRN 128347-40-0 CMF C24 H19 N O12

CM 2

CRN 20546-03-6 CMF C10 H6 N2 O4 S

RN 128197-52-4 CAPLUS

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, tetraester with 1,1'-[ethylidenebis(4,5,6-trihydroxy-3,1-phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 128197-51-3 CMF C18 H18 O8

CRN 20546-03-6 CMF C10 H6 N2 O4 S

CN Ethanone, 1,1'-[ethylidenebis(4,5,6-trihydroxy-3,1-phenylene)]bis- (9CI) (CA INDEX NAME)

RN 128347-37-5 CAPLUS

CN Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)-2,3,4-trihydroxy-, methyl ester (9CI) (CA INDEX NAME)

RN 128347-40-0 CAPLUS

CN Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)-2,3,4-trihydroxy-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

ANSWER 35 OF 51 CAPLUS COPYRIGHT 2003 ACS L7

1964:483903 CAPLUS ΑN

DN 61:83903

OREF 61:14569h,14570a-d

Preparation of phenolic polynuclear compounds with sulfonyl bridges ΤI

Kaemmerer, H.; Harris, M. AU

Univ. Mainz/Rhein, Germany CS

J. Polymer. Sci. (1964), 2(Pt. A;9), 4003-10 SO

DT Journal

Unavailable LΑ

For diagram(s), see printed CA Issue. GΙ

By use of the Fries rearrangement, 8 new sulfones were prepd. 6,6'-AΒ Dihydroxy-3,3'-dimethyldiphenyl sulfone (6 millimoles) was dissolved in 15 ml. ClSO3H, and the mixt. heated for 1 hr. at 40-50.degree.. After 24 hrs. at room temp., the mixt. was added to ice to ppt. I (R2 = R4 = H, R3 = Me, R = OH, R1 = R5 = ClSO2) (Ia), m. 184-7.degree. (petr. ether). 4,4'-Dihydroxydiphenyl sulfone (II) (0.01 mole) added to 40 ml. ClSO3H and the mixt. treated similarly, gave III (R = H), m. 201-3.degree. (dioxane). II (12 millimoles) added to 50 ml. ClSO3H and the mixt. heated for 3-4 hrs. at 130-140.degree. and kept overnight gave III (R = ClO2S), m. 230-40.degree. (decompn.) (dioxane). MeC6H4SO2Cl (19 g.) was added to 45 ml. Me2CO and 16.5 g. Na salt of 3,4-Cl(HO)C6H3Me and the mixt. shaken and poured into H2O; 5 g. of the resulting 4,2-MeClC6H3O3SC6H4Me-4 was treated with AlCl3 at 110.degree. and 150.degree., and the mixt. decompd. with HCl-ice and stirred. The resulting solid was dissolved in 10% KOH and acidified to give I (R = R1 = R3 = R4 = H, R2 = Me, R5 = Cl), m. 146-7.5.degree. (alc.)I (R = R1 = R3 = R4 = Me, R2 = Br, R5 = C1), m. 152-3.degree. (alc.), wasprepd. from 6 g. 4-bromo-2,3,5,6-tetramethylbenzenesulfonyl chloride, 40 ml. Me2CO, and 3.3 g. Na salt of 3-chloro-4-hydroxytoluene Na salt of 3',4-dimethyl-6'hydroxydiphenyl sulfone, 10 ml. H2O, and 1.9 g. p-MeC6H4SO2Cl gave, in a similar manner, 4,2,6-Me(p-MeC6H4SO2)2-C6H2OH, m. 221-3.degree. (CHCl3-petr. ether). IV was prepd. by heating a mixt. of 3.1 g. 4-hydroxy-3,5-toluenedisulfonyl chloride, 15 ml. 3-chloro-4-methoxytoluene (V), and 6 ml. SnCl4 for 70 hrs. at 90.degree.. The mixt. was poured into H2O and the brown org. layer collected and steam-distd. The residue was boiled with MeOH, and the product demethylated with HI to give IV, m. 238-40.degree. (C6H6). VI, prepd. similarly from 15 ml. V, 4.75 g. Ia, and 6 ml. SnCl4, m. 246-52.degree. (AcOH-H2O).

IT 92317-01-6, m-Benzenedisulfonyl chloride, 5,5'-sulfonylbis[2hydroxy-

(prepn. of)

RN92317-01-6 CAPLUS

CNm-Benzenedisulfonyl chloride, 5,5'-sulfonylbis[2-hydroxy- (7CI) (CA INDEX NAME)

```
ANSWER 41 OF 51 USPATFULL
L7
AN
       2002:230490 USPATFULL
       Inhibition of pulp and paper yellowing using nitroxides,
TΤ
      hydroxylamines and other coadditives
       Seltzer, Raymond R., New City, NY, United States
IN
       Wolf, Jean-Pierre, Courtaman, SWITZERLAND
       Heitner, Cyril, Pierrefonds, CANADA
       Schmidt, John A., L'ile Bizard, CANADA
       McGarry, Peter F., L'ile Bizard, CANADA
       Cunkle, Glen T., Stamford, CT, United States
       Nelson, Randall B., Seattle, WA, United States
       Ciba Specialty Chemicals Corporation, Tarrytown, NY, United States (U.S.
PA
       corporation)
PΙ
       US 6447644
                          В1
                               20020910
       US 2002124980
                          Α1
                               20020912
      US 2001-974382
                               20011010 (9)
AΤ
      Division of Ser. No. US 2000-573401, filed on 18 May 2000 Division of
RLI
       Ser. No. US 1998-119567, filed on 20 Jul 1998, now patented, Pat. No. US
       6254724, issued on 3 Jul 2001
PRAI
      US 1997-54968P
                           19970807 (60)
      US 1997-53489P
                           19970723 (60)
      Utility
DT
       GRANTED
FS .
      Primary Examiner: Griffin, Steven P.; Assistant Examiner: Halpern, Mark
EXNAM
LREP
       Stevenson, Tyler A., Hall, Luther A. R.
      Number of Claims: 34
CLMN
       Exemplary Claim: 1
ECL
       0 Drawing Figure(s); 0 Drawing Page(s)
DRWN
LN.CNT 3054
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
   184840-94-6
        (inhibition of pulp and paper yellowing using nitroxides and other
        co-additives)
RN
     184840-94-6 USPATFULL
CN
     Benzenesulfonic acid, 3,3'-carbonylbis[4,6-dihydroxy-, disodium salt (9CI)
         (CA INDEX NAME)
```

## Na

L7

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ANSWER 42 OF 51 USPATFULL
AN
       1998:54656 USPATFULL
TI
       Positive-working recording material containing aluminum base and
       mat-finished quinone diazide layer developable in weak alkaline
       developers
IN
       Elsaesser, Andreas, Idstein, Germany, Federal Republic of
       Buhr, Gerhard, Koenigstein, Germany, Federal Republic of
       AGFA-Gevaert AG, Leverkusen, Germany, Federal Republic of (non-U.S.
PA
       corporation)
PΙ
                               19980519
       US 5753405
ΑI
       US 1996-674971
                               19960703 (8)
```

Continuation of Ser. No. US 1995-374906, filed on 19 Jan 1995, now RLI abandoned DE 1994-4401940 PRAI 19940124 DT Utility FS Granted Primary Examiner: Young, Christopher G. **EXNAM** Foley & Lardner LREP CLMN Number of Claims: 20 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 717 CAS INDEXING IS AVAILABLE FOR THIS PATENT. 151438-20-9 151438-21-0 (Pos. working recording material with improved developability) RN 151438-20-9 USPATFULL 1-Naphthalenesulfonic acid, 3-diazo-3,4-dihydro-4-oxo-, ester with CN1,1'-[methylenebis(4,5,6-trihydroxy-3,1-phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 168766-34-5 CMF C17 H16 O8

$$\begin{array}{c} \text{OH} \\ \text{HO} \\ \text{OH} \end{array}$$

CM 2

CRN 20680-48-2 CMF C10 H6 N2 O4 S

RN 151438-21-0 USPATFULL

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with 1,1'-[methylenebis(4,5,6-trihydroxy-3,1-phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 168766-34-5 CMF C17 H16 O8

$$\begin{array}{c} \text{OH} \\ \text{HO} \\ \text{OH} \end{array}$$

CRN 20546-03-6 CMF C10 H6 N2 O4 S

IT 168766-34-5 168766-38-9

(development promoter; Pos. working recording material with improved developability)

RN 168766-34-5 USPATFULL

CN Ethanone, 1,1'-[methylenebis(4,5,6-trihydroxy-3,1-phenylene)]bis- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OH} \\ \text{HO} \\ \text{OH} \end{array}$$

RN 168766-38-9 USPATFULL

CN Ethanone, 1,1'-[methylenebis(4,6-dihydroxy-5-methyl-3,1-phenylene)]bis-(9CI) (CA INDEX NAME)

ANSWER 43 OF 51 USPATFULL

AN 1998:1737 USPATFULL

L7

TI Sulfonyl compound and thermal-sensitive recording medium using the same

```
Saito, Toranosuke, Ibaraki, Japan
IN
       Oda, Shigeru, Ibaraki, Japan
       Kawabata, Eiji, Ibaraki, Japan
       Sanko Haihatsu Kagaku Kenkyusho, Ibaraki, Japan (non-U.S. corporation)
PA
                               19980106
ΡI
       US 5705452
       US 1995-540722
ΑI
                               19951011 (8)
PRAI
       JP 1994-249265
                           19941014
       JP 1995-12134
                           19950130
DT
       Utility
FS
       Granted
       Primary Examiner: Hess, Bruce H.
EXNAM
       Kane, Dalsimer, Sullivan, Kurucz, Levy, Eisele and Richard, LLP
LREP
CLMN
       Number of Claims: 2
ECL
       Exemplary Claim: 1
DRWN
       16 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 715
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
   177325-72-3P
        (prepd. as developer for thermal sensitive recording material)
RN
     177325-72-3 USPATFULL
     Phenol, 4,4'-sulfonylbis[2-(phenylsulfonyl)- (9CI) (CA'INDEX NAME)
CN
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L7 ANSWER 5 OF 51 CAPLUS COPYRIGHT 2003 ACS
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AN 1997:9405 CAPLUS

DN 126:39783

TI Thermal recording material with improved light resistance

IN Ogino, Naomi; Oomori, Takashi; Ueda, Hiroshi; Midorikawa, Yoshimi; Wakita, Yutaka

PA Nippon Seishi Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

1111.011 1							
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
PI JP 08267922	A2	19961015	JP 1995-75866	19950331			
JP 2936556	B2	19990823		•			
PRAI JP 1995-75866		19950331					

IT 184840-94-6

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(UV absorber; light-resistant thermal recording material contg. UV absorber and fluorescent dye)

RN 184840-94-6 CAPLUS

CN Benzenesulfonic acid, 3,3'-carbonylbis[4,6-dihydroxy-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

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ANSWER 9 OF 51 CAPLUS COPYRIGHT 2003 ACS
L7
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1995:226867 CAPLUS AN

DN122:12274

Jet-printing inks, their stabilization and phenolsulfonic acids therefor ΤI

Van Toan Vien; Laver, Hugh Stephen; Leppard, David George IN

Ciba-Geigy A.-G., Switz. PA

Ger. Offen., 17 pp. SO

CODEN: GWXXBX

DTPatent

LA German

FAN.C	NT 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 4337862	A1	19940511	DE 1993-4337862	19931105
	US 5509957	Α	19960423	US 1993-147706	19931104
	JP 06234945	A2	19940823	JP 1993-303400	19931109
PRAI	CH 1992-3456		19921109		
os	MARPAT 122:12274				

IT 159411-67-3

RL: MOA (Modifier or additive use); USES (Uses) (jet-printing inks, their stabilization and phenolsulfonic acids therefor)

159411-67-3 CAPLUS RN

CN Benzenesulfonic acid, 3,3'-(1-methylethylidene)bis[6-hydroxy-, dilithium salt (9CI) (CA INDEX NAME)

●2 Li

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L7 ANSWER 27 OF 51 CAPLUS COPYRIGHT 2003 ACS
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AN 1989:554634 CAPLUS

DN 111:154634

TI Heat-resistant aromatic polyester liquid crystals

IN Matsumoto, Tetsuo; Imamura, Takayuki; Tsujimoto, Keizo

PA Japan Ester Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP 01060627	A2	19890307	JP 1987-214634	19870828	

PRAI JP 1987-214634 19870

IT 123046-20-8P 123046-21-9P 123046-24-2P

RL: PREP (Preparation)

(liq. crystal, prepn. of, heat-resistant with good melt moldability)

RN 123046-20-8 CAPLUS

CN 1,4-Benzenedicarboxylic acid, polymer with 4-hydroxybenzoic acid and 3,3'-(1-methylethylidene)bis[6-hydroxybenzenesulfonic acid] disodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 59970-82-0

CMF C15 H16 O8 S2 . 2 Na

•2 Na

CM 2

CRN 100-21-0 CMF C8 H6 O4

CM 3

CRN<sub>.</sub> 99-96-7 CMF C7 H6 O3

RN 123046-21-9 CAPLUS

CN 1,3-Benzenedicarboxylic acid, polymer with 1,4-benzenedicarboxylic acid, 4-hydroxybenzoic acid and 3,3'-(1-methylethylidene)bis[6-hydroxybenzenesulfonic acid] disodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 59970-82-0

CMF C15 H16 O8 S2 . 2 Na

•2 Na

CM 2

CRN 121-91-5 CMF C8 H6 O4

CM 3

CRN 100-21-0 CMF C8 H6 O4

CM 4

CRN 99-96-7 CMF C7 H6 O3

RN 123046-24-2 CAPLUS

CN 1,4-Benzenedicarboxylic acid, polymer with 6-hydroxy-2naphthalenecarboxylic acid and 3,3'-(1-methylethylidene)bis[6hydroxybenzenesulfonic acid] disodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 59970-82-0 CMF C15 H16 O8 S2 . 2 Na

●2 Na

CM 2

CRN 16712-64-4 CMF C11 H8 O3

CM 3

CRN 100-21-0 CMF C8 H6 O4

```
ANSWER 33 OF 51 CAPLUS COPYRIGHT 2003 ACS
L7
AN
     1981:532502 CAPLUS
DN
     95:132502
     Biphenylmethane derivative and pharmaceutical compositions containing it
TI
IN
     Klemm, Kurt; Haerlin, Ruediger; Zick, Franz; Baron, Lothar; Pruesse,
     Wolfgang; Krueger, Uwe
     Byk-Gulden Lomberg Chemische Fabrik G.m.b.H., Fed. Rep. Ger.
PA
     Eur. Pat. Appl., 34 pp.
SO
     CODEN: EPXXDW
DT
     Patent
LA
     German
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
                                            _____
                                                             -----
     -----
                      _ - - -
                                            EP 1980-107328
                                                             19801125
     EP 29990
                       A1
                            19810610
PΙ
     EP 29990
                       В1
                            19820908
         R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
                                            AT 1980-107328
                                                             19801125
     AT 1523
                       E
                            19820915
     IL 61600
                       Α1
                            19840629
                                            IL 1980-61600
                                                             19801201
                                            AU 1980-64997
                                                             19801202
     AU 8064997
                       A1
                            19810611
                       B2
                            19840405
     AU 535714
                                            DK 1980-5175
     DK 8005175
                            19810605
                                                             19801203
                       Α
                                            ZA 1980-7544
                                                             19801203
                       Α
                            19811125
     ZA 8007544
     ES 497410
                                            ES 1980-497410
                                                             19801203
                       Α1
                            19820101
                       A2
                            19810907
                                            JP 1980-171453
                                                             19801204
     JP 56113754
PRAI CH 1979-10763
                            19791204
     EP 1980-107328
                            19801125
     79093-73-5P 79093-74-6P 79093-75-7P
IT
     79093-76-8P 79093-77-9P 79093-78-0P
     79093-79-1P 79093-80-4P 79093-81-5P
     79105-65-0P 79105-66-1P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
     79093-73-5 CAPLUS
RN
     Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, compd. with
CN
     1,4-dimethylpiperazine (1:1) (9CI) (CA INDEX NAME)
     CM
          1
          78480-14-5
     CRN
     CMF C15 H16 O8 S2
```

$$Me$$
 $CH_2$ 
 $OH$ 
 $SO_3H$ 
 $SO_3H$ 

CRN 106-58-1 CMF C6 H14 N2

RN 79093-74-6 CAPLUS

CN Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, disodium salt (9CI) (CA INDEX NAME)

$$^{\mathrm{SO_3H}}$$
  $^{\mathrm{Me}}$   $^{\mathrm{OH}}$   $^{\mathrm{SO_3H}}$   $^{\mathrm{SO_3H}}$ 

## ●2 Na

RN 79093-75-7 CAPLUS

Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, compd. with 1,2-ethanediamine (1:1) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 78480-14-5 CMF C15 H16 O8 S2

$$\begin{array}{c} \text{SO}_3\text{H} \\ \text{Me} \\ \text{CH}_2 \\ \text{SO}_3\text{H} \end{array}$$

CM 2

CRN 107-15-3 CMF C2 H8 N2

 $_{\rm H_2N^-CH_2^-CH_2^-NH_2}$ 

RN 79093-76-8 CAPLUS

CN Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, compd. with 1-methylpiperazine (1:1) (9CI) (CA INDEX NAME)

CM :

CRN 78480-14-5 CMF C15 H16 O8 S2

HO Me OH 
$$CH_2$$
  $SO_3H$ 

CM 2

CRN 109-01-3 CMF C5 H12 N2

CN

RN 79093-77-9 CAPLUS

Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, compd. with 1,4-bis(phenylmethyl)piperazine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 78480-14-5 CMF C15 H16 O8 S2

HO Me OH 
$$CH_2$$
  $SO_3H$ 

CM 2

CRN 1034-11-3 CMF C18 H22 N2

RN 79093-78-0 CAPLUS

CN Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, compd. with 1-methyl-4-(phenylmethyl)piperazine (1:1) (9CI) (CA INDEX NAME)

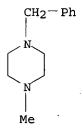
CM 1

CRN 78480-14-5 CMF C15 H16 O8 S2

$$^{\mathrm{SO_3H}}$$
  $^{\mathrm{Me}}$   $^{\mathrm{OH}}$   $^{\mathrm{SO_3H}}$   $^{\mathrm{SO_3H}}$ 

CM 2

CRN 62226-74-8 CMF C12 H18 N2



RN 79093-79-1 CAPLUS

CN Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, compd. with morpholine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 78480-14-5 CMF C15 H16 O8 S2

CM 2

CRN 110-91-8 CMF C4 H9 N O

RN 79093-80-4 CAPLUS

CN Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, barium salt (1:1) (9CI) (CA INDEX NAME)

Ba

RN 79093-81-5 CAPLUS

CN Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, compd. with hydrazine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 78480-14-5 CMF C15 H16 O8 S2

$$\begin{array}{c} \text{SO}_3\text{H} \\ \text{HO} \\ \text{CH}_2 \\ \text{SO}_3\text{H} \end{array}$$

CM 2

CRN 302-01-2 CMF H4 N2

 $H_2N-NH_2$ 

RN 79105-65-0 CAPLUS

CN Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, compd. with piperazine (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 78480-14-5 CMF C15 H16 O8 S2

$$\begin{array}{c} \text{SO}_3\text{H} \\ \text{HO} \\ \text{CH}_2 \\ \text{SO}_3\text{H} \end{array}$$

CM 2

CRN 110-85-0 CMF C4 H10 N2



RN 79105-66-1 CAPLUS

CN Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl-, compd. with 1,4-diazabicyclo[2.2.2]octane (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 78480-14-5 CMF C15 H16 O8 S2

$$^{\mathrm{SO_3H}}$$
 $^{\mathrm{HO}}$ 
 $^{\mathrm{CH_2}}$ 
 $^{\mathrm{SO_3H}}$ 
 $^{\mathrm{SO_3H}}$ 

CRN 280-57-9 CMF C6 H12 N2



IT 78480-14-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (prepn. of, as bactericide)

RN 78480-14-5 CAPLUS

CN Benzenesulfonic acid, 3,3'-methylenebis[6-hydroxy-4-methyl- (9CI) (CA INDEX NAME)

HO 
$$CH_2$$
 OH  $SO_3H$ 

L7 ANSWER 40 OF 51 CAPLUS COPYRIGHT 2003 ACS

AN 1957:9584 CAPLUS

DN 51:9584

OREF 51:2043a-e

TI New and biologically active diphenylmethane derivatives

IN Hahn, Ladislaus A.; Fekete, Janos

PA Aktiebolaget "Ferrosan"

DT Patent

LA Unavailable

FAN.CNT 1

RN

PATENT NO. KIND DATE APPLICATION NO. DATE

PI US 2731494 19560117 US

IT 102440-96-0, Gallic acid, 2,2'-methylenebis[6-sulfo108012-19-7, Benzoic acid, 3,3'-methylenebis[2,4,6trihydroxy-5-sulfo-

(prepn. of) 102440-96-0 CAPLUS

CN Gallic acid, 2,2'-methylenebis[6-sulfo- (6CI) (CA INDEX NAME)

$$CO_2H$$
 OH  $CH_2$  OH OH  $CH_2$  OH

RN 108012-19-7 CAPLUS

CN Benzoic acid, 3,3'-methylenebis[2,4,6-trihydroxy-5-sulfo- (6CI) (CA INDEX NAME)

```
L7
     ANSWER 41 OF 51 USPATFULL
AN
       2002:230490 USPATFULL
       Inhibition of pulp and paper yellowing using nitroxides,
TI
       hydroxylamines and other coadditives
IN
       Seltzer, Raymond R., New City, NY, United States
       Wolf, Jean-Pierre, Courtaman, SWITZERLAND
       Heitner, Cyril, Pierrefonds, CANADA
       Schmidt, John A., L'ile Bizard, CANADA
       McGarry, Peter F., L'ile Bizard, CANADA
       Cunkle, Glen T., Stamford, CT, United States
       Nelson, Randall B., Seattle, WA, United States
       Ciba Specialty Chemicals Corporation, Tarrytown, NY, United States (U.S.
PA
       corporation)
       US 6447644
                               20020910
ΡI
                          В1
       US 2002124980
                               20020912
                          Α1
                               20011010 (9)
ΑI
       US 2001-974382
RLI
       Division of Ser. No. US 2000-573401, filed on 18 May 2000 Division of
       Ser. No. US 1998-119567, filed on 20 Jul 1998, now patented, Pat. No. US
       6254724, issued on 3 Jul 2001
PRAI
       US 1997-54968P
                           19970807 (60)
       US 1997-53489P
                           19970723 (60)
DT
       Utility
       GRANTED
FS
       Primary Examiner: Griffin, Steven P.; Assistant Examiner: Halpern, Mark
EXNAM
       Stevenson, Tyler A., Hall, Luther A. R.
LREP
       Number of Claims: 34
CLMN
ECL
       Exemplary Claim: 1
       0 Drawing Figure(s); 0 Drawing Page(s)
DRWN
LN.CNT 3054
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    184840-94-6
        (inhibition of pulp and paper yellowing using nitroxides and other
        co-additives)
RN
     184840-94-6 USPATFULL
     Benzenesulfonic acid, 3,3'-carbonylbis[4,6-dihydroxy-, disodium salt (9CI)
CN
         (CA INDEX NAME)
```

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L7
     ANSWER 44 OF 51 USPATFULL
       96:33735 USPATFULL
AN
TТ
       Ink compositions
       Toan, Vien V., Lentigny, Switzerland
IN
       Laver, Hugh S., Reinach, Switzerland
       Leppard, David G., Marly, Switzerland
PA
       Ciba-Geigy Corporation, Tarrytown, NY, United States (U.S. corporation)
PΙ
       US 5509957
                                19960423
ΑI
       US 1993-147706
                                19931104 (8)
PRAI
       CH 1992-3456
                            19921109
       Utility
DT
FS
       Granted
EXNAM
       Primary Examiner: Bell, Mark L.; Assistant Examiner: Hertzog, Scott L.
       Hall, Luther A. R., Kovaleski, Michele A.
LREP
       Number of Claims: 11
CLMN
       Exemplary Claim: 1
ECL
DRWN
       No Drawings
LN.CNT 619.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    159411-67-3
        (jet-printing inks, their stabilization and phenolsulfonic acids
        therefor)
                  USPATFULL
RN
     159411-67-3
     Benzenesulfonic acid, 3,3'-(1-methylethylidene)bis[6-hydroxy-, dilithium
CN
       salt (9CI)
                   (CA INDEX NAME)
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## ●2 Li

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L7
     ANSWER 45 OF 51 USPATFULL
ΑN
       95:69368 USPATFULL
TТ
       Functionalized tris(hydroxyphenyl) compounds
       Fritsch, John R., Corpus Christi, TX, United States
IN
       Fruchey, Olan S., Corpus Christi, TX, United States
       Kuila, Debasish, Corpus Christi, TX, United States
       Kvakovszky, George, Corpus Christi, TX, United States
       Murphy, Mark A., Corpus Christi, TX, United States
       Sheehan, Michael T., Corpus Christi, TX, United States
       Sounik, James R, Corpus Christi, TX, United States
       Vicari, Richard, Corpus Christi, TX, United States
PA
       Hoechst Celanese Corp., Somerville, NJ, United States (U.S. corporation)
PΙ
       US 5438142
                               19950801
ΑI
       US 1993-105824
                               19930810 (8)
       Continuation-in-part of Ser. No. US 1992-921450, filed on 28 Jul 1992,
RLT
       now abandoned which is a continuation-in-part of Ser. No. US
       1992-829123, filed on 3 Feb 1992, now abandoned
DT
       Utility
FS
       Granted
EXNAM
       Primary Examiner: Higel, Floyd D.
LREP
       Ferrell, Michael W.
```

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L7
     ANSWER 47 OF 51 USPATFULL
AN
       95:7868 USPATFULL
TI
       Thermosensitive recording material
IN
       Nishimura, Masaki, Tokyo, Japan
       Toyofuku, Kunitaka, Sakura, Japan
       New Oji Paper Co., Ltd., Tokyo, Japan (non-U.S. corporation)
PΆ
       US 5384303
                                19950124
PΙ
ΑI
       US 1992-916693
                                19920722 (7)
       JP 1991-251364
                           19910930
PRAI
DΤ
       Utility
       Granted
FS
       Primary Examiner: Hess, B. Hamilton
EXNAM
       Armstrong, Westerman, Hattori, McLeland & Naughton
LREP
       Number of Claims: 6
CLMN
ECL
       Exemplary Claim: 1
DRWN
      No Drawings
LN.CNT 646
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    151533-18-5
        (color-forming compns. contg. dye precursors and, for thermosensitive
        recording materials)
RN
     151533-18-5 USPATFULL
CN
     Benzenepropanoic acid, 3-acetyl-.beta.-(3-acetyl-4-hydroxyphenyl).-4-
       hydroxy-.beta.-methyl- (9CI) (CA INDEX NAME)
```

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· L7
      ANSWER 48 OF 51 USPATFULL
       94:17899 USPATFULL
AN
TI
        Positive type photoresist composition comprising polyaromatic
       hydroxy quinone diazide esters as the photosensitive ingredient
 IN
        Uenishi, Kazuya, Shizuoka, Japan
        Kawabe, Yasumasa, Shizuoka, Japan
        Kokubo, Tadayoshi, Shizuoka, Japan
 PΑ
        Fuji Photo Film Co., Ltd., Kanagawa, United States (non-U.S.
        corporation)
 PΤ
       US 5290658
                                19940301
       US 1992-873158
AΙ
                                19920424 (7)
PRAI
        JP 1991-122851
                            19910426
       Utility
DT
FS
        Granted
       Primary Examiner: Schilling, Richard L.; Assistant Examiner: Chu, John
EXNAM
LREP
       Sughrue, Mion, Zinn, Macpeak & Seas
       Number of Claims: 3
CLMN
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 662
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    146837-32-3P
         (prepn. and application of, in pos.-working high-resoln. heat-resistant
         novolak resin-contg. photoresists)
RN
     146837-32-3 USPATFULL
      1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with
CN
```

1,1'-[[(4-hydroxy-3-methoxyphenyl)methylene]bis(4,6-dihydroxy-3,1-phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 146533-78-0 CMF C24 H22 O8

CM 2

CRN 20546-03-6 CMF C10 H6 N2 O4 S

IT 135977-06-9P

(prepn. of)

RN 135977-06-9 USPATFULL

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with 1,1'-[(phenylmethylene)bis(4,5,6-trihydroxy-3,1-phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 133682-16-3 CMF C23 H20 O8

CRN 20546-03-6 CMF C10 H6 N2 O4 S

## IT 133682-16-3

(reaction of, with naphthoquinonediazidosulfonyl chloride)

RN 133682-16-3 USPATFULL

CN Ethanone, 1,1'-[(phenylmethylene)bis(4,5,6-trihydroxy-3,1-phenylene)]bis-(9CI) (CA INDEX NAME)

## IT 146533-78-0

(reaction of, with naphthoquinonediazidosulfonyl chloride, in prepn. of photosensitive compd. for pos.-working photoresists based on novolak resin)

RN 146533-78-0 USPATFULL

CN Ethanone, 1,1'-[[(4-hydroxy-3-methoxyphenyl)methylene]bis(4,6-dihydroxy-3,1-phenylene)]bis-(9CI) (CA INDEX NAME)

- L7 ANSWER 49 OF 51 USPATFULL
- AN 92:104877 USPATFULL
- TI Positive-working photoresist composition
- IN Uenishi, Kazuya, Shizuoka, Japan

Sakaguchi, Shinji, Shizuoka, Japan Kokubo, Tadayoshi, Shizuoka, Japan4)

Fuji Photo Film Co., Ltd., Kanagawa, Japan (non-U.S. corporation)

PI US 5173389

19921222

AI US 1990-514811

PA

19900426 (7)

PRAI JP 1989-107013 19890426 DTUtility FS Granted Primary Examiner: Bowers, Jr., Charles L.; Assistant Examiner: Chu, John **EXNAM** Sughrue, Mion, Zinn, Macpeak & Seas LREP Number of Claims: 13 CLMN ECL Exemplary Claim: 1 No Drawings DRWN LN.CNT 760 CAS INDEXING IS AVAILABLE FOR THIS PATENT. 133682-16-3D, dimethylhydroxybenzyl deriv., diazidonaphthoquinone (pos. photoresists contg. alkali-sol. novolak resins and) RN133682-16-3 USPATFULL CN Ethanone, 1,1'-[(phenylmethylene)bis(4,5,6-trihydroxy-3,1-phenylene)]bis-(9CI) (CA INDEX NAME)

L7 ANSWER 50 OF 51 USPATFULL 92:82677 USPATFULL AN Positive type photoresist composition comprising as a photosensitive ΤI ingredient a derivative of a triphenylmethane condensed with an o-quinone diazide IN Uenishi, Kazuya, Shizuoka, Japan Kawabe, Yasumasa, Shizuoka, Japan Kokubo, Tadayoshi, Shizuoka, Japan PΑ Fuji Photo Film Co., Ltd., Kanagawa, Japan (non-U.S. corporation) ΡI US 5153096 19921006 ΑI US 1991-670513 19910318 (7) RLI Continuation of Ser. No. US 1989-301763, filed on 26 Jan 1989, now abandoned PRAI JP 1988-14898 19880126 DT Utility FS Granted Primary Examiner: Schilling, Richard L.; Assistant Examiner: Chu, John **EXNAM** Sughrue, Mion, Zinn Macpeak & Seas LREP CLMN Number of Claims: 6 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 602 CAS INDEXING IS AVAILABLE FOR THIS PATENT. 126776-67-8 (sulfonylation of, in prepn. of pos.-working photoresist) RN 126776-67-8 USPATFULL 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with 1,1'-[[(3,4-dihydroxyphenyl)methylene]bis(4,5,6-trihydroxy-3,1phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CRN 143868-74-0 CMF C23 H20 O10

CM 2

CRN 20546-03-6 CMF C10 H6 N2 O4 S

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L7
     ANSWER 51 OF 51 USPATFULL
AN
       92:12832 USPATFULL
       Positive photoresist composition utilizing O-quinonediazide and novolak
TI
       resin
IN
       Uenishi, Kazuya, Shizuoka, Japan
       Kawabe, Yasumasa, Shizuoka, Japan
       Kokubo, Tadayoshi, Shizuoka, Japan
PA
       Fuji Photo Film Co., Ltd., Kanagawa, Japan (non-U.S. corporation)
       US 5089373
PΙ
                               19920218
AΙ
       US 1989-363568
                               19890607 (7)
PRAI
       JP 1988-139904
                           19880607
DT
       Utility
FS
       Granted
       Primary Examiner: Bowers, Jr., Charles L.; Assistant Examiner: Young,
EXNAM
       Christopher G.
LREP
       Sughrue, Mion, Zinn, Macpeak & Seas
CLMN
       Number of Claims: 9
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 609
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 128152-08-9 128152-12-5 128197-52-4
        (pos.-working photoresist compn. contg.)
RN
     128152-08-9 USPATFULL
     Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)-
CN
       2,3,4-trihydroxy-, methyl ester, 6-diazo-5,6-dihydro-5-oxo-1-
```

naphthalenesulfonate (9CI) (CA INDEX NAME)

CRN 128347-37-5 CMF C19 H18 O10

CM 2

CRN 20546-03-6 CMF C10 H6 N2 O4 S

CN

RN 128152-12-5 USPATFULL

Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)2,3,4-trihydroxy-, 4-nitrophenyl ester, 6-diazo-5,6-dihydro-5-oxo-1naphthalenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 128347-40-0 CMF C24 H19 N O12

CM :

CRN 20546-03-6 CMF C10 H6 N2 O4 S

RN 128197-52-4 USPATFULL

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, tetraester with 1,1'-[ethylidenebis(4,5,6-trihydroxy-3,1-phenylene)]bis[ethanone] (9CI) (CA INDEX NAME)

CM 1

CRN 128197-51-3 CMF C18 H18 O8

CM 2

.CRN 20546-03-6 CMF C10 H6 N2 O4 S

IT 128197-51-3, 1,1-(5,5'-Diacetyl-2,3,4,2',3',4'hexahydroxy)diphenylethane 128347-37-5, 1,1-(5,3'-Diacetyl2,3,4,4',5',6'-hexahydroxy)diphenylacetic acid methyl ester

128347-40-0

(reaction of, in prepn. of naphthoquinonediazide ester for pos.-working photoresist compn.)

RN 128197-51-3 USPATFULL

CN Ethanone, 1,1'-[ethylidenebis(4,5,6-trihydroxy-3,1-phenylene)]bis- (9CI)

RN 128347-37-5 USPATFULL

CN Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)-2,3,4-trihydroxy-, methyl ester (9CI) (CA INDEX NAME)

RN 128347-40-0 USPATFULL

CN Benzeneacetic acid, 5-acetyl-.alpha.-(5-acetyl-2,3,4-trihydroxyphenyl)-2,3,4-trihydroxy-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)

(FILE 'HOME' ENTERED AT 10:36:08 ON 08 JUL 2003)

FILE 'REGISTRY' ENTERED AT 10:36:19 ON 08 JUL 2003

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 103 S L1 FUL

L4 0 S L3 AND CLATHRATE

FILE 'CAPLUS, USPATFULL' ENTERED AT 10:38:43 ON 08 JUL 2003

L5 78 S L3

L6 0 S L5 AND CLATHRATE L7 51 S L5 AND ?HYDROXY?

=> d l1

L1 HAS NO ANSWERS

L1 STI

G1 C, O, S, N

G2 SO2, C (O) CH3

Structure attributes must be viewed using STN Express query preparation.